

# FAST - Future Aerospace Strategic Thinking

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# FAST Research Session Presentation Overview

- Future Research
  - Not an existing project.
- Aerospace Research
  - Involves aerospace personnel and facilities.
- Strategic Planning
  - FAST Presentation
  - Discussions
  - White Paper / Proposal
- Thinking about the Whole Project
  - Development of the project.





# FAST Research Session Presentation Format

- One Slide
- Need/Problem
- Concept
- Apparatus
- Objective
- Advancement
- End Users / Sponsor
- 3 Minute Presentation
- 3+ Minutes for Questions and Transition



# FAST Research Session Slide Summary

- Put everything on one slide.
- Three main sections from left to right is good.
- Somewhat similar to a conference poster.
- Include a key concept figure, if possible.
- Do not need to cover everything in 3 minute overview.
- Covers material that would be in a White Paper.
- Next slide is a template to use.
- Modified from NASA technology development slide.





# FAST Research Session Attendee Participation

- Ask Questions after each Presentation
- Research Topic Discussions Follow-on
  - Brief Discussion following Session
  - Optional in-depth Robin Hall Atrium
- Informal Project Idea Discussion
  - **Weds., 12-1 pm, Robin Hall Atrium**
- Present at Future FAST Sessions
  - **November 12, 2025 at 12-1 pm**
  - February 12, 2026 at 12-1 pm



# Previous FAST Presentation Updates

## September / November 2024

**Daile Zhang**, Aerial-Borne Electric Field Mills and Soundings for Studying Warm Clouds, Fogs, and Dust

- Declined NASA Pycumulus Proposal Submitted yesterday (02/11/2025)
- Working to submit proposal to NSF Translation to Practice

**Jake Carstens**, UND Weather Update: Building a Student-Integrated Leader at the Intersection of Meteorology, Education, and Social Science

- Been in discussions with people in the Education at UND. Modifications into Broadcast Class.

**Keith Crisman**, Casualty Autonomous Emergency Transport [CATT]

- Testing facility is underdevelopment.

## February 2025

**Jordan Christian**, Predictability of Flash Drought in Subseasonal Forecasting Systems

- Working on proposal to be submitted this semester with a collaborator that is visiting UND shortly.

**Marcos Fernandez Tous**, Space Studies, Writing Grants/Proposals Class

- Teaching Proposal Writing Class – Fall 2025



# September 10, 2025 FAST Presentation List

## **Soizik Laguette, Earth System Science and Policy (ESSP)**

- Developing a Biochar Initiatives for a Greener and Healthier Tomorrow (BRIGHT) framework

## **Mounir Chrit, Atmospheric Sciences**

- Toward Improved UAS Flight Planning: Data Assimilation for Enhanced Weather Forecasting over North Dakota

## **Preeti Nair, Space Studies**

- Ablative Pulsed Plasma Thruster: Microsatellite Propulsion using Teflon Propellant

## **Christian Nairy, Atmospheric Sciences**

- Quantifying Electrical Influences on Ice Crystal Aggregation

